

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte STEVEN H. LEITCH,  
LISA J. BARTZ,  
and KATHLEEN B. FISH

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Appeal No. 96-0937  
Application 08/203,723<sup>1</sup>

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ON BRIEF

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Before STONER, Chief Administrative Patent Judge, and WINTERS and WILLIAM F. SMITH, Administrative Patent Judges.

WILLIAM F. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1, 2, 4 through 6, 8 through 12, 14 through 16, and 18 through 26, all the claims pending in the application. The examiner withdrew the rejection of claims 9, 10, and 19 in the

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<sup>1</sup> Application for patent filed February 28, 1994. According to appellants, the application is a continuation of Application 08/026,144, filed March 2, 1993, now abandoned; which is a continuation of Application 07/671,578, filed March 19, 1991, now abandoned.

Advisory Action mailed November 30, 1994 (Paper No. 15). This leaves claims 1, 2, 4 through 6, 8, 11, 12, 14 through 16, 18 and 20 through 26 for our consideration.

Claim 1 is illustrative of the subject matter on appeal and reads as follows:

1. A hair care composition comprising:

(a) a hair styling/conditioning component comprising:

(i) from about 0.1% to about 10%, by weight of the composition, of a silicone macromer-containing hair styling/conditioning copolymer, said silicone macromer, molecular weight (weight average) of from about 1,000 to about 50,000, covalently bonded to a nonsilicone organic polymer backbone or organic oligomeric portion of a polymeric backbone, said copolymer having a molecular weight of from about 200,000 to about 1,000,000 and a Tg of at least about -20EC;

(ii) from about 0.1% to about 99.7%, by weight of the composition, of volatile solvent in which said copolymer is soluble or dispersible, said volatile solvent being a volatile silicone fluid which is immiscible in water, wherein said copolymer is solubilized or dispersed in said volatile silicone fluid to provide a copolymer-volatile solvent solution, and wherein, when said solution is dried, the copolymer separates into a discontinuous phase which includes the silicone macromer and a continuous phase which includes the nonsilicone organic polymer backbone or organic oligomeric portion; and

(iii) a nonvolatile plasticizer that is safe for topical application to the hair and skin of humans, wherein said composition has a plasticizer:copolymer weight ratio of from about 1:20 to about 1:1 and said plasticizer is miscible with said copolymer-volatile solvent solution and has a solubility parameter,  $\delta$ , of between about 7 and about 10 (calories/cc)<sup>1/2</sup>; and

(b) from about 65% to about 99.7% of an additional carrier vehicle which is water.

The references relied upon by the examiner are:

Bolich, Jr. (Bolich N658) 5,100,658 Mar. 31, 1992 (filed July 16, 1990)

Bolich, Jr. (Bolich N646) 5,104,646 Apr. 14, 1992 (filed July 14, 1990)

Claims 1, 2, 4 through 6, 8, 11, 12, 14 through 16, 18, and 20 through 26 stand rejected under 35 U.S.C. § 102(e) as anticipated by Bolich N646 or Bolich N658.<sup>2</sup> We reverse.

Simply put, the examiner has failed to establish that either Bolich N646 or Bolich N658 describes a composition within the scope of the claims on appeal with the specificity required by 35 U.S.C. § 102. There is no dispute that each of the Bolich references describes hair care compositions which comprise the silicone macromer-containing copolymer required by claim 1(a)(i), the volatile silicone fluid required by claim 1(a)(ii), and water required by claim 1(b). See generally column 14, line 57-column 17, line 66 (silicone macromer-containing copolymer); column 9, line 62-column 10 line 31 (volatile silicone fluid) and the examples (water) and, specifically, examples such as Example XII which contain a silicone macromer-containing copolymer, volatile

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<sup>2</sup> The statement of the rejections set forth on page 3 of the Examiner's Answer includes claims 9, 10, and 19. We see this as an inadvertent error on the part of the examiner in view of the statement at page 1 of the Examiner's Answer that claims 9, 10, and 19 are only objected to as being dependent upon a rejected base claim.

silicone fluid and water, of Bolich N658. Parallel disclosure is set forth in Bolich N646 at column 21, line 21-column 24, line 28 (silicone macromer-containing copolymer); column 16, line 35-column 17, line 4 (volatile silicone fluids); the examples (water) and specifically Example IV.

The dispute in this appeal centers on whether the Bolich references describe compositions containing a silicone macromer-containing copolymer, volatile silicone fluid, water, and the nonvolatile plasticizer required by claim 1(a)(iii). The examiner has presented an ever-shifting position in this regard. The first Office Action issued by the examiner in this application on May 20, 1994, was a final rejection which merely referred to Examples I-X of Bolich N646 and Examples I-XXI of Bolich N658. The examiner did not explain in what manner any one of these examples describes a composition containing the components required by the claims on appeal. Rather, the examiner merely stated that these examples “reads [sic] on the claimed invention.” See page 4 of Paper 13 mailed May 20, 1994. In responding to this aspect of the final rejection on November 18, 1994, appellants argued at page 4 that none of the cited examples of Bolich N646 or Bolich N658 describes a composition that includes the claimed nonvolatile plasticizer. The examiner attempted to clarify the rejection in the Advisory Action (Paper No. 15, mailed November 30, 1994), directing attention to the

fact that the plasticizer according to the present invention may be a citrate and that the cited patents use "sodium citrate."

In pursuing this appeal, appellants explain at page 3 of the Appeal Brief (Paper No. 16, January 23, 1995) that sodium citrate does not meet the requirements of the claims on appeal in regard to the nonvolatile plasticizer. The examiner apparently agreed that sodium citrate is not a nonvolatile plasticizer according to the present invention since the examiner pointed to other disclosure in the Bolich references in restating the rejections in the Examiner's Answer. Specifically the examiner pointed to column 24, lines 35-53 of Bolich N646 and column 18 of Bolich N658 at page 3 of the Examiner's Answer as disclosing the nonvolatile plasticizer required by the claims on appeal. In addition, the examiner noted at page 4 of the Examiner's Answer that the present specification teaches that silicone copolyols can be used as the plasticizer and that Bolich N658 "discloses various silicone compounds at col. 10, line 35 to cols. 11-12, which can be construed as (iii)."

At pages 2-3 of the first Reply Brief filed June 1, 1995 (Paper No. 18), appellants went to great lengths to point out that none of the portions of the Bolich patents relied upon by the examiner as disclosing silicone copolyols actually describe those compounds. However, appellants pointed out in the paragraph bridging pages 3-4 of the first Reply Brief that, while silicone copolyols are not disclosed in the cited sections

relied upon by the examiner, they are disclosed in the “surfactant” section of the specification of Bolich N646 at column 9, lines 1-44. Appellants then went on to argue why that disclosure did not negatively affect the patentability of the claims on appeal.

The examiner filed a Supplemental Examiner’s Answer on August 21, 1995. However, that paper did not clarify how either of the Bolich patents describes a composition according to the claimed invention including the required nonvolatile plasticizer. A second Reply Brief was filed (Paper No. 20, September 25, 1995) which reiterated appellant’s position which was only noted by the examiner and not responded to in substance. See Paper No. 21, mailed October 24, 1995.

As the record now stands, we have no idea what specific compound or compounds disclosed in either Bolich N646 or Bolich N658 the examiner considers to be the nonvolatile plasticizer required by the claims on appeal. Nor do we have a clear indication on what basis the examiner believes that either Bolich reference describes a composition having the four components required by the claims on appeal. As seen from the above analysis, the examiner’s position has continually shifted with each response by appellants until the second Reply Brief was filed by appellants on September 25, 1995. That Reply Brief was met, in substance, by silence from the examiner. Under these circumstances, we do not find that the examiner’s initial burden

of establishing a prima facie case of anticipation has been properly discharged.

Accordingly, we reverse the two rejections.

#### Other Issues

There are disclosures in Bolich N646 and Bolich N658 which appellants and the examiner have not discussed on this record which are relevant in determining the patentability of the claims on appeal. We direct attention to Example XI of Bolich N646 and Example XIX in Bolich N658. Each of these examples is directed to a hair styling rinse composition which comprises in relevant part a silicone macromer-containing copolymer, a volatile silicone fluid, and water. What has not been considered on this record is whether the silicon gum/fluid premix component of these compositions can be considered to be the nonvolatile plasticizer of the present invention.

Each of these examples contains a premix which comprises a polydimethyl siloxane gum and a 350 centistoke polydimethyl siloxane fluid. The 350 centistoke polydimethyl siloxane fluid may be the nonvolatile plasticizer of the claimed invention for a number of reasons. First, the present specification at page 17, lines 25-31, states that the nonvolatile plasticizer of the present invention may be a methyl alkyl silicone. Preferred methyl alkyl silicones are described at page 18, lines 30-31 as having C<sub>2</sub> - C<sub>20</sub> alkyl and from 1 to about 500 siloxane monomer units. Second, we point to the disclosures appearing at column 10, line 32 - column 11, line 7, of Bolich N658 and

column 17, line 5 - 47, of Bolich N646 where nonvolatile silicone fluids are described which comprise polyalkyl siloxanes, the alkyl moiety of which may be the same group or different groups, e.g., methyl and ethyl. The polyalkyl siloxanes of the Bolich patents may contain from about 7 to about 8,000 siloxane monomer units. Thus, it appears that the nonvolatile silicone fluids described in these portions of the Bolich patents are the same as, or similar to, the plasticizers described at page 17 of the specification as "methyl alkyl silicones." See also the disclosure at page 18 of the specification that preferred nonvolatile plasticizers include methyl alkyl silicones having  $C_2 - C_{20}$  alkyl and from 1 to about 500 siloxane monomer units.

We also point out the disclosure at column 12, lines 56-65 of Bolich N658 that preferred nonvolatile silicone materials can comprise nonvolatile silicone fluids having viscosities of less than about 100,000cP (centipoise) and silicone gums having higher viscosities. The same disclosure appears at column 19, lines 20-29, of Bolich N646.

If the 350 centistoke polydimethyl siloxane fluid of Example XI of Bolich N646 and Example XIX of Bolich N658 meets the solubility requirement of claim 1 (a)(iii) on appeal, it would appear that those examples anticipate claim 1. Upon return of the application, the examiner should reconsider Bolich N646 and Bolich N658 in their entireties taking into account the above analysis. The substantial similarities existing between the 350 centistoke polydimethyl siloxane fluid used in the above identified



examples of the Bolich references and the methyl alkyl silicones which can be used as the nonvolatile plasticizer in the claimed invention appear to form a reasonable basis upon which a rejection under 35 U.S.C. §§ 102/103 can be made which would shift the burden to appellants to establish in an objective manner that the 350 centistoke polydimethyl siloxane fluid used in these examples does not meet solubility parameters of claim 1 (a)(iii). See In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 432 (CCPA 1977).

We emphasize that the examiner should carefully consider the above identified portions of the Bolich patents which describe the use of methyl alkyl silicones as nonvolatile silicone fluids. This portion of the examiner's analysis is very important in view of the withdrawal of all rejections of claims 9, 10, and 19. These claims include the preferred methyl alkyl silicone plasticizer of the present invention which, as set forth above, appears to be described by Bolich N646 and Bolich N658. If so, the examiner should consider reinstating the rejection of these claims.

In making these observations, we are aware of appellants' arguments at page 4 of the second Reply Brief that Bolich N646 does not teach incorporating the silicone copolyol into the silicone macromer-containing copolymer/volatile silicone phase of the present invention. To the extent a similar argument might be relevant in analyzing the compositions described in the above identified examples of the Bolich references, we

point out that claim 1 does not appear to require that the nonvolatile plasticizer be present in any particular part or phase of the composition. In this regard, appellants should take into account that the hair styling rinse composition of the above identified examples of the Bolich patents is formed by mixing all of the components to homogeneity. As seen from Examples VIII and IX of the present specification, the present compositions are also mixed to form a homogeneous mixture. Thus, it would appear reasonable to expect that if the 350 centistoke polydimethyl siloxane fluid or the nonvolatile polyalkyl siloxanes of the Bolich patents meet the solubility requirement of claim 1(a)(iii) on appeal, the resulting homogeneous composition of either reference would appear to be indistinguishable from the homogeneous composition of the present invention.

The decision of the examiner is reversed.

REVERSED

Bruce H. Stoner, Jr., Chief	)	
Administrative Patent Judge	)	
	)	
	)	BOARD OF PATENT
Sherman D. Winters	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
	)	
	)	
William F. Smith	)	
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Application 08/203,723

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